



UNITED STATES PATENT AND TRADEMARK OFFICE

12

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,531	07/13/2001	Ellis Junior Smith	DEE6270P0090US	3484

7590 12/02/2003
POLIT & ASSOCIATES, LLC
3333 WARRENVILLE ROAD
SUITE 520
LISLE, IL 60532

EXAMINER

LOPEZ, FRANK D

ART UNIT	PAPER NUMBER
----------	--------------

3745

DATE MAILED: 12/02/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/905,531

Applicant(s)

SMITH ET AL.

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13,17-28 and 30-36 is/are pending in the application.

4a) Of the above claim(s) 34 is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-13,17-28,30-33,35 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14. 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 8, 2003 has been entered.

Response to Amendment

Applicant's arguments filed July 17, 2003, have been fully considered but they are not deemed to be persuasive.

Applicant argues that none of the references disclose a single control lever arranged to selectively operate one of either a front or a rear mounted implement. Applicant is mistaken. See the discussion of the 103 rejection below concerning Jenkins.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

Claims 1, 8-11, 13, 17, 18, 20, 25, 26 28, 30, 32, 33, 35 and 36 are rejected under 35 U.S.C. § 103 as being unpatentable over Jenkins in view of Applicant's admitted prior art. Jenkins discloses a hydraulic system for a utility vehicle comprising a source of pressurized hydraulic fluid connected to a diverter valve selectively positioned to connect the source to either a first front mounted loader type implement (5 (via e.g. cylinder 11)), or a second rear mounted backhoe type implement (17 (via e.g. cylinder 4)); a control actuator, being a third control lever (25) mechanically connected to the diverter valve; and first (24, 25) and second (32, 33) levers positonable to control flow, by a control valve, between the source of pressurized fluid to the diverter valve; wherein the second lever is adjacent a position of a seat, when the seat is located to operate the backhoe; but does not disclose that the second implement is one of a blade, a mower deck, a cultivator and a tiller; or that there is a single lever to control flows between the source and the diverter valve.

Applicant's admitted prior art teaches, for a utility vehicle having a front mounted loader and a rear mounted implement; that the rear mounted implement can be one of a cultivator or rear blades (e.g. page 1 line 10-11).

Since rear mounted implements of Jenkins and Applicant's admitted prior art are interchangeable in the utility vehicle art, it would have been obvious at the time the invention was made to one having ordinary skill in the art to exchange the rear mounted implement of Jenkins with a rear mounted cultivator or blade, as taught by Applicant's admitted prior art, as a matter of engineering expediency.

Since the second lever is only for operating the backhoe, replacing the backhoe with the cultivator or blades, would also eliminate the need for the second lever. Therefore, it would have been obvious to eliminate the second lever as part of replacing the backhoe with the cultivator or blades.

Claims 4-6, 12, 21-23, 27 and 31 are rejected under 35 U.S.C. § 103 as being unpatentable over Jenkins in view of Applicant's admitted prior art, as applied to claim 1, 11, 18, 1, and 18, respectively, and further in view of Harada et al. Jenkins discloses all of the elements of claims 4-6, 12, 23, 27 and 31, as discussed in the above rejection, but does not disclose that the third control lever controls a control switch, located on the first lever in a position to be thumb activated; or that the control switch is in an electrical circuit.

Harada et al teaches, for a hydraulic system of a utility vehicle comprising a source of pressurized hydraulic fluid connected to a diverter valve (17), selectively positioned to connect the source to either a first (e.g. 6) or second (e.g. 7) hydraulic cylinder; wherein flow between the pressure source and the diverter valve is controlled by a lever (11); that the diverter valve is controlled by a momentary control switch operated by a control operator (12a, 12b) and located on the lever in a position to be thumb activated; and in an electrical circuit.

Since the controllers for the diverter valve of Jenkins and Harada et al are functionally equivalent in the tractor art; it would have been obvious at the time the invention was made to one having ordinary skill in the art to replace the third control

Art Unit: 3745

lever of Jenkins with a momentary control switch, operated by a control operator, and positioned on the lever so that it can be thumb activated, as taught by Harada et al, as a matter of engineering expediency.

Claim 17 is rejected under 35 U.S.C. § 103 as being unpatentable over Jenkins in view of Applicant's admitted prior art, as applied to claim 1, and further in view of Hein et al. Jenkins discloses all the elements of claim 17; but does not disclose that there are third and fourth cylinders operable with the first and second cylinders, respectively.

Hein et al teaches, for a hydraulic system for a utility vehicle comprising a source (14) of pressurized hydraulic fluid connected to a diverter valve connected to a pilot valve (40) and selectively positioned to connect the source to either a first cylinder (22b, fig 3) or second cylinder (22c, fig 4) hydraulic implement; that there are third and fourth cylinders operable with the first and second cylinders, respectively.

Since the cylinder configuration of Jenkins, and Hein et al are functionally equivalent in the utility vehicle art; it would have been obvious at the time the invention was made to one having ordinary skill in the art to include there are third and fourth cylinders operable with the first and second cylinders, respectively, of Jenkins, as taught by Hein et al, as a matter of engineering expediency.

Claims 2, 7, 13, 19 and 24 are rejected under 35 U.S.C. § 103 as being unpatentable over Jenkins in view of Applicant's admitted prior art, as applied to claim 1, and further in view of Balzer and Hein et al. Jenkins discloses all the elements of claims 2, 7, 13, 17, 19 and 24; but does not disclose that there are a plurality of pilot operated hydraulic valves connected to a solenoid operated pilot valve; or that the plurality of pilot operated valves are cartridge valves held within the valve housing.

Balzer teaches, for a hydraulic system for a utility vehicle comprising a source of pressurized hydraulic fluid connected to a diverter valve selectively positioned to connect the source to either a first (e.g. 12) front mounted or second (e.g. 14) rear mounted hydraulic implement (see column 1 line 26-33, 58-63); that the diverter valve

Art Unit: 3745

includes a pilot operated valve (e.g. 20) connected to a solenoid operated (52) pilot valve (49), electrically connected operated to a control switch (column 2 line 58-64).

Hein et al teaches, for a a hydraulic system for a utility vehicle comprising a source (14) of pressurized hydraulic fluid connected to a diverter valve connected to a pilot valve (40) and selectively positioned to connect the source to either a first (scraper body B) or second (scraper body C) hydraulic implement; that the diverter valve includes a plurality of pilot operated valves (e.g. 28, 30) connected to a pilot valve.

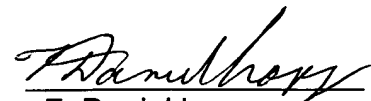
Since the diverter valves of Jenkins, Hein et al and Balzer are functionally equivalent in the utility vehicle art; it would have been obvious at the time the invention was made to one having ordinary skill in the art to make the diverter valve of Jenkins includes a plurality of pilot operated valves connected to a pilot valve, as taught by Hein et al, with the pilot valve being a solenoid operated pilot valve, as taught by Balzer, as a matter of engineering expediency.

Official notice is taken that it is well known to make valves cartridge valves held within a valve housing. It would have been obvious at the time the invention was made to one having ordinary skill in the art to make the plurality of pilot operated valves of Jenkins cartridge valves held within the valve housing of Jenkins, as a matter of engineering expediency.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (703) 308-0008. The examiner can normally be reached on Monday-Thursday from 6:30 AM -4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on (703) 308-1044. The fax number for this group is (703) 872-9302. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.



F. Daniel Lopez
Primary Examiner
Art Unit 3745
December 1, 2003